



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/806,939	05/08/2001	Serge Haumont	P 279245	9553
909	7590	06/08/2004	EXAMINER	
PILLSBURY WINTHROP, LLP			PEACHES, RANDY	
P.O. BOX 10500			ART UNIT	PAPER NUMBER
MCLEAN, VA 22102			2686	8

DATE MAILED: 06/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/806,939

Applicant(s)

HAUMONT, SERGE

Examiner

Randy Peaches

Art Unit

2686

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 17-31 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-10, 17-19, 23-24, 27, 29 and 30 is/are rejected.
- 7) ☒ Claim(s) 7, 20-22, 25, 26, 28 and 31 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>04/14/2004</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Objections

The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 25-28 been renumbered 25-29.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding ***claim 2***, the phrase "network element" is be referenced improperly.

Examiner suggests that the phrase be changed to reference the "mobile station".

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. **Claims 1, 8, 19, and 23-24** are rejected under 35 U.S.C. 102(e) as being anticipated by Tiedemann et al (U.S. Patent Number 6,381,454 B1).

Regarding **claims 1, 8, 19, and 23**, Tiedemann et al discloses in column 2 lines 29-37, of a method, a network element, a communication network, and a mobile station, which reads on claimed "cellular network, allocating a temporary identity to at least one mobile station in a communication network, which reads on claimed "cellular network", the method comprising:

- using a Mobile Switching Center (MSC, 10), which reads on claimed "network element", having an identifier of its own to allocate a Temporary Reference Number (TRN) to the at least one mobile station wherein the said TRN includes at least part of an identifier indicating the said MSC (10).

Regarding **claim 24**, according to **claim 23**, Tiedemann et al discloses in column 15 lines 20-42, where the mobile station is configured to use the identification in connection with cell registration, which reads on claimed "cell update".

2. **Claims 17-18, 29 and 30** are rejected under 35 U.S.C. 102(e) as being anticipated by Wallentin et al (U.S. Publication Number 2002/0086685 A1).

Regarding **claim 17**, Wallentin et al discloses in paragraph [0052], a radio station controller for a cellular network, configured to route data packets in a General Packet Radio Service, including a Temporary Mobile Station Identification (TMSID) allocated to a mobile station, wherein the said TMSID includes at least part of an identifier indicating a Radio Network Controller (RNC), which reads on claimed "network element", which allocated the temporary identity;

- and wherein the said RNC is configured to used at least part of the said TMSID to route data packets to the second RNC, which reads on claimed "first network element", service the mobile station. See paragraph [0051, 0063, 0077,0075].

Regarding **claim 18**, Wallentin et al discloses in paragraph [0051], a radio station controller for a cellular network, further configured to temporarily store an identifier of the network element currently serving the mobile station.

Regarding **claims 29 and 30**, according **claim 17**, Wallentin et al discloses in paragraph [0005], where the radio station controller, which reads on claimed "radio station controller", is a base station controller.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. ***Claims 2-3 and 9-10*** are rejected under 35 U.S.C. 103(a) as being unpatentable over Tiedemann et al (U.S. Patent Number 6,381,454 B1) in view of Sawyer et al (U.S. Patent Number 5,920,814).

Regarding ***claims 2 and 10***, according to ***claims 1 and 8***, Tiedemann et al discloses in column 2 lines 29-37, of a method and a network element, allocating a temporary identity to at least one mobile station in a communication network, which reads on claimed "cellular network", the method comprising:

- using a Mobile Switching Center (MSC, 10), which reads on claimed "network element", having an identifier of its own to allocate a Temporary Reference Number (TRN) to the at least one mobile station wherein the said TRN includes at least part of an identifier indicating the said MSC (10).

However, Tiedemann et al does not disclose where the said TRN includes a paging identity which is unique to each of the at least one mobile station.

Sawery et al discloses in column 5 lines 40-65, of a TMSI Allocation Unit (TAU, 23) used to allocate unique TMSI's to each mobile station which also identifies the servicing area of the MSC, which reads on claimed "paging area", as taught in column 2 lines 50-65.

Therefore at the time of the invention one of ordinary skill in the art would modify the teaching of Tiedemann et al (U.S. Patent Number 6,381,454 B1) to include Sawyer et al (U.S. Patent Number 5,920,814) in order to provide a method that assigns unique temporary identities that also includes the area identity for optimizing the identity of a mobile station within a service area.

Regarding **claim 3**, as the combination of Tiedemann et al (U.S. Patent Number 6,381,454 B1) and Sawyer et al (U.S. Patent Number 5,920,814) are made, the combination according to **claim 2**, Sawyer discloses further where the uniquely identification of the said mobile station based on the identifier of the said mobile station and the said identification of the service area, which reads on claimed "paging area", where the said TMSID was allocated. See column 2 lines 50-65.

Regarding **claim 9**, as the combination of Tiedemann et al (U.S. Patent Number 6,381,454 B1) and Sawyer et al (U.S. Patent Number 5,920,814) are made, the combination according to **claim 8**, Sawyer discloses wherein the said MSC is configured to use the said TMSID and the identity of the said service area in which the

Art Unit: 2686

said mobile station is located to derive an identification of a second MSC, which is taught by Sawyer et al in column 2 lines 51-65.

4. **Claims 4-6** are rejected under 35 U.S.C. 103(a) as being unpatentable over Tiedemann et al (U.S. Patent Number 6,381,454 B1) in view of Sawyer et al (U.S. Patent Number 5,920,814) and in further view of Onoe et al (U.S. Patent Number 5,361,396 B1).

5. Regarding **claim 4**, as the above combination of Tiedemann et al (U.S. Patent Number 6,381,454 B1) and Sawyer et al (U.S. Patent Number 5,920,814) are made, the combination according to **claim 2**, fails to teach wherein each of the plurality of paging area includes an associated master network element for allocating a paging identity to each of the at least one mobile stations in the paging area.

Onoe et al discloses in columns 5 and 7 lines 30-43 lines 39-58 respectively, wherein the requesting a location code, which reads on claimed "paging identity" is carried out by accessing the control center (101), which reads on claimed "master network element" in order to obtain an identification number for the mobile station within a respected location registration area.

Therefore at the time of the invention one of ordinary skill in the art would modify the combined teachings of Tiedemann et al (U.S. Patent Number 6,381,454 B1) and Sawyer et al (U.S. Patent Number 5,920,814) to further include Onoe et al (U.S. Patent

Number 5,361,396 B1) in order to mandate the functionality of assigning a said identification of a mobile station in the said control center.

Regarding **claim 5**, as the above combination of Tiedemann et al (U.S. Patent Number 6,381,454 B1), Sawyer et al (U.S. Patent Number 5,920,814) and Onoe et al (U.S. Patent Number 5,361,396 B1) are made, the combination according to **claim 4**, Onoe et al further teaches wherein each of the said registration areas is coupled to a plurality of mobile control center and/or base stations, and wherein the method further comprises using the said identification number for routing uplink traffic to the said mobile control center and/or base station currently serving the said mobile station. See columns 3, 4 and 6 lines 17-29 lines 11-30 lines 41-66, respectively.

Regarding **claim 6**, as the above combination of Tiedemann et al (U.S. Patent Number 6,381,454 B1), Sawyer et al (U.S. Patent Number 5,920,814) and Onoe et al (U.S. Patent Number 5,361,396 B1) are made, the combination according to **claim 5**, Onoe et al further teaches where when a said mobile station moves beyond the border of a location registration area, which reads on claimed "first paging area" of a plurality of paging areas to another location, the said mobile control center and/or base station of the second paging area using the said identification number and the said location code of the second paging area. See column 5 lines 11-43.

6. **Claim 18** is rejected under 35 U.S.C. 102(e) as being anticipated by Wallentin et al (U.S. Publication Number 2002/0086685 A1) in view Onoe et al (U.S. Patent Number 5,361,396 B1).

Regarding **claim 18**, according to **claim 17**, Wallentin et al discloses in paragraph [0052], a radio station controller for a cellular network, configured to route data packets in a General Packet Radio Service, including a Temporary Mobile Station Identification (TMSID) allocated to a mobile station, wherein the said TMSID includes at least part of an identifier indicating a Radio Network Controller (RNC), which reads on claimed "network element", which allocated the temporary identity;
and wherein the said RNC is configured to use at least part of the said TMSID to route data packets to the second RNC, which reads on claimed "first network element", service the mobile station. See paragraph [0051, 0063, 0077,0075].

However, Wallentin et al does not disclose wherein a mobile station contains a context for temporarily storing an identifier of the network element serving the said mobile station.

Onoe et al discloses in column 4 lines 48-51, where the mobile station store the said identification number, which contains the identity of the serving base station, within its database.

Therefore, at the time of the invention one of ordinary skill in the art would modify the teaching of Tiedemann et al (U.S. Patent Number 6,381,454 B1) to include Onoe et al (U.S. Patent Number 5,361,396 B1) in order for the said mobile station to identify with

the respected serving network element when information is needed to be routed. The said mobile station retains the identity of the serving network element based on the said temporary identity.

7. **Claim 27** is rejected under 35 U.S.C. 103(a) as being unpatentable over Tiedemann et al (U.S. Patent Number 6,381,454 B1) in view of Mademann (U.S. Patent Number 6,081,723).

Regarding **claim 27**, according to **claim 8**, Tiedemann et al discloses in column 2 lines 29-37, of a method and a network element, allocating a temporary identity to at least one mobile station in a communication network, which reads on claimed "cellular network", the method comprising:

- using a Mobile Switching Center (MSC, 10), which reads on claimed "network element", having an identifier of its own to allocate a Temporary Reference Number (TRN) to the at least one mobile station wherein the said TRN includes at least part of an identifier indicating the said MSC (10).

However, Tiedemann et al does not disclose where the said network element is a support node.

Mademann teaches in column 1 lines where the packet data service nodes are GPRS support nodes.

Therefore, at the time of the invention one of ordinary skill in the art would modify the teaching of Tiedemann et al (U.S. Patent Number 6,381,454 B1) to include

Mademann (U.S. Patent Number 6,081,723) in order to transmit data packets between mobile stations in a General Packet Radio Service.

Allowable Subject Matter

Claims 7, 20-22, 25-26, 28 and 31 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding ***claim 7***, according to ***claim 6***, wherein only the paging identity is used for paging the mobile station, and the method further comprises using the temporary identity for signaling.

Regarding ***claim 20***, according to ***claim 19***, further comprises a database element configured to:

receive an inquiry including the at least part of the identifier of the network element that allocates the temporary identity and information relating to a location where the temporary identity was allocated, such as a paging area identifier; and
determine, based on the inquiry, an address of the network element which allocated the temporary identity.

Art Unit: 2686

Regarding **claim 25**, according to **claim 23**, wherein the mobile station is configured to use at least part of the identifier of the network element that allocates the temporary identity for data transfer, and to use the identifier for signaling.

Regarding **claim 26**, according to **claim 23**, wherein the temporary identity includes 3 to 5 bits of the identifier of the network element that allocates the temporary identity.

Regarding **claim 28**, according to **claim 8**, wherein the temporary identity includes 3 to 5 bits of the identifier of the network element that allocates the temporary identity.

Regarding **claim 31**, according to **claim 17**, wherein the temporary identity includes 3 to 5 bits of the identifier of the network element that allocates the temporary identity.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Randy Peaches whose telephone number is (703) 305-8993. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on (703) 305-4379. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Randy Peaches
May 11, 2004

Nguyen Vo
6-1-04

NGUYENT.VO
PRIMARY EXAMINER